

REMARKS

Claims 4-7 and 11-15 were rejected under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. Also, claims 14 and 15 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Additionally, claims 16 and 17 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. However, Applicant notes that claims 4-7 and 11-15 do not depend from multiple dependent claims, and that claim 17 is not present in the original application. Applicant believes that perhaps the Examiner is basing these comments on the specification of a corresponding UK application (from which this US application claims priority), which was attached to an assignment document submitted with the new application papers.

Claims 1-17 have been canceled and claims 18-31 have been added in the attempt to avoid confusion. Accordingly, claims 18-31 are now pending in the application.

35 U.S.C. § 101 Rejection

Claim 1-7 and 14 were rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 14 has been cancelled, therefore the rejection is now moot. Applicant notes that some of the features recited in the original claims 1-7 are now recited in new claims 18-24; however, the subject matter of the original claims has been amended to overcome the rejection.

35 U.S.C. § 102 Rejection

Claims 1-3 and 8-10 were rejected under 35 U.S.C. 102(e) as being anticipated by Mori (U.S. Patent No. 6,678,839). As described above, original claims 1-17 have been cancelled.

However, Applicant notes that some of the features recited in the original claims 1-3 and 8-10 are now recited in new claims 18-20 and 25-27.

Applicant respectfully requests the examination of new claims 18-31.

Mori teaches a system using a looped interface and a troubleshooting function. The system is shown in Figure 1 of Mori and includes a disc array comprising a plurality of hard disc drives (HDDs) 200, which are connected to a fibre channel 120 connected to a fibre channel port 110 that functions as a host for controlling devices in a loop. The system also includes a port bypass circuit 210 which can arbitrarily select and control the building into a loop or the bypassing of each HDD 200 according to a port bypass circuit controller 100. In the system, a faulty device (HDD 200) can cause a loop fault. Mori also teaches troubleshooting the loop fault by identifying and bypassing the faulty device (HDD 200) while the device is disconnected and replaced.

Mori teaches,

“When a loop fault is caused, an initial HDD address is first set to bypass HDD according to a fixed rule and is stored (a step 501 shown in FIG. 5). In this case, HDDs are bypassed in the ascending order of addresses and the address OX01 of a device (HDD) to be bypassed is stored.”

“As shown in FIG. 3A, HDD 200 having the stored address is bypassed from the interface loop using the port bypass circuit controller 100 (a step 502 shown in FIG. 5) and the loop is initialized (a step 503 shown in FIG. 5).”

“The initialization of the loop is executed when the fibre channel port 110 makes a predetermined packet rounded in the order of arrangement on the FC loop, checks HDD having what address is connected and writes the address of the connected HDD to the packet. When the packet is returned to the original fibre channel port 110 without an accident, it is judged that the system is recovered from the loop fault. In case the packet is not returned in fixed time, it is judged that the loop is disconnected and the loop fault is not recovered.” (Emphasis added) (Column 3 Line 55 – Column 4 Line 7)

Therefore, in Figure 3, Mori teaches a procedure for bypassing a HDD to specify a faulty location. More specifically, Mori teaches a method of identifying the faulty device by bypassing

each HDD in turn until the loop fault is no longer detected. (Mori, Column 3 Line 46 – Column 4 Line 27)

Applicant respectfully reminds the Examiner that the standard for “anticipation” is one of fairly strict identity. To anticipate a claim of a patent, a single prior source must contain all the claimed essential elements. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 U.S.P.Q.81, 91 (Fed.Cir. 1986); *In re Donahue*, 766 F.2d 531, 226 U.S.P.Q. 619, 621 (Fed.Cir. 1985). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989)

Applicant respectfully submits that Mori fails to teach or suggest “a device driver operable to monitor an operational status of the first device, and consequent upon a change in the operational status of the first device, to generate fault report data indicating whether the change of operational status of the first device was caused internally within the first device or externally by another device connected to the first device” as recited in claim 18.

Applicant submits that Mori fails teach monitoring an operational status of any of the HDDs 200 as such, but instead performs the method described in Figure 3 when a loop fault (which is associated with the array of HDDs 200 and the loop formed by the fibre channel 120 as a whole) occurs. Furthermore, and contrary to the suggestion of the Examiner, Mori neither teaches nor suggests “generate **fault report data** indicating whether the **change of operational status** of the first device was caused internally within the first device or externally by another device connected to the first device”. Instead, Mori teaches sequentially bypassing each of the HDDs 200 until a loop fault is no longer detected. Generating fault report data is a significant advance over the approach taught in Mori because, for example, this data can be used to analyse faults in systems which are more complex than the simple loop arrangement.

In accordance, independent claim 18 is believed to patentably distinguish over Mori.

Claims 19-24 depend on claim 18 and are therefore believed to patentably distinguish over Mori for the same reasons.

Likewise, independent claims 25 and 31 recite features similar to those highlighted above with regard to independent claim 18 and are therefore believed to patentably distinguish over Mori for at least the reasons given above. Claim 26-30 depend on claim 25 and are therefore believed to patentably distinguish over Mori for the same reasons.

CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits that all pending claims are now in condition for allowance, and an early notice to that effect is earnestly solicited.

If a phone interview would speed allowance of any pending claims, such is requested at the Examiner's convenience.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-10800/BNK.

Respectfully submitted,



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